
UUU UUU EEEEEEEEEEEEEEE TTTTTTTTTTTTTTT PPPPPPPPPPPP SSSSSSSSSSS YYY YYY
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FILEID**SATSSS44

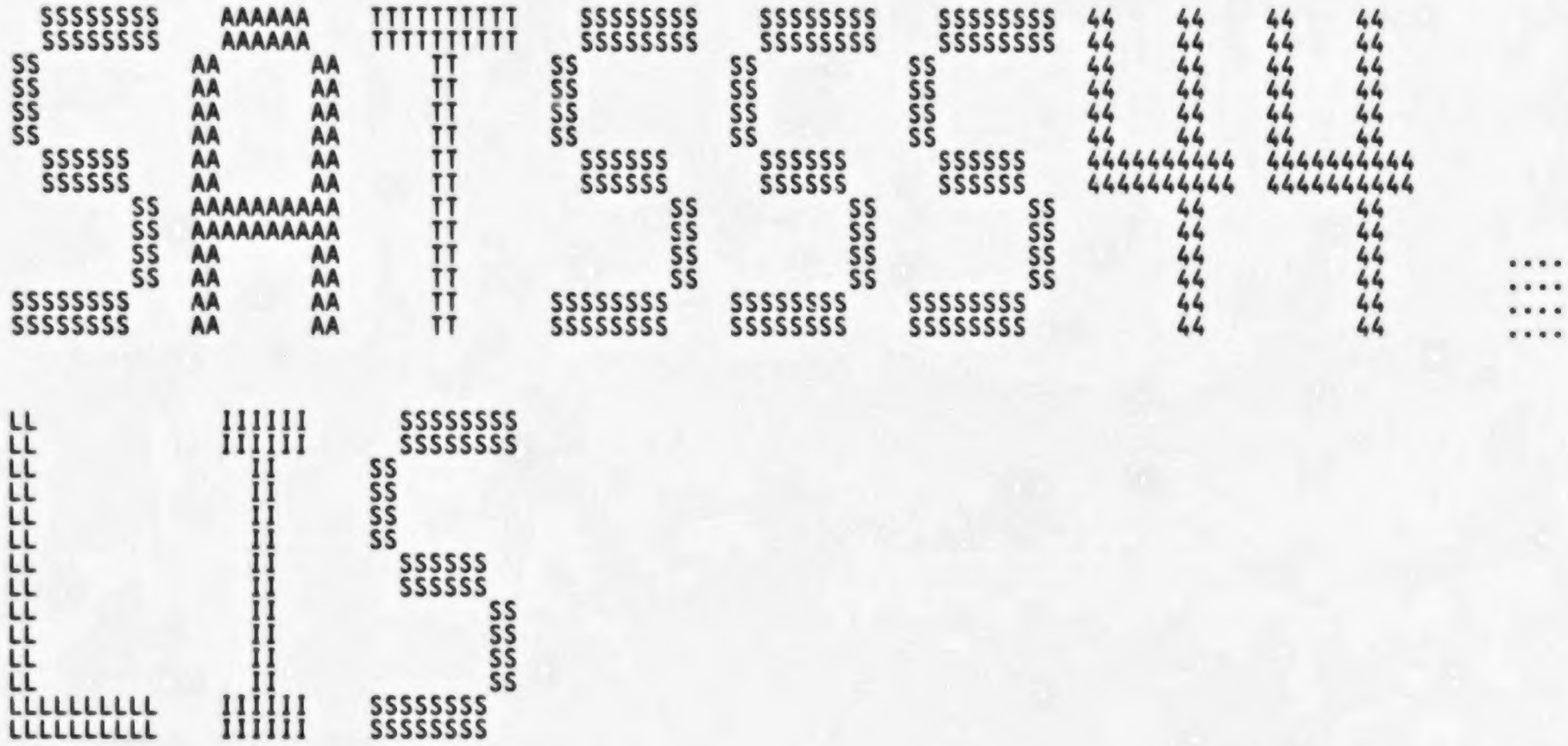

Table of contents

```
0000     1          .TITLE  SATSSS44 SATS SYSTEM SERVICE TESTS  $SETPRN (SUCC S.C.)
0000     2          .IDENT  'V04-000'
0000     3
0000     4 ;
0000     5 ;*****************************************************************************
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0000    24 ;*                                                                           *
0000    25 ;*                                                                           *
0000    26 ;*****************************************************************************
0000    27 ;
0000    28
0000    29 ;++
0000    30 ; FACILITY:     SYSTST (SATS SYSTEM SERVICE TESTS)
0000    31 ;
0000    32 ; ABSTRACT:
0000    33 ;
0000    34 ;                THIS MODULE CONTAINS SUBROUTINES WHICH, WHEN LINKED
0000    35 ; WITH SUCCOMMON.OBJ, FORM TEST MODULE SATSSS44 TO TEST SUCCESSFUL
0000    36 ; OPERATION OF THE $SETPRN SYSTEM SERVICE. THE SERVICE IS INVOKED
0000    37 ; UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY
0000    38 ; SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE.  CORRECT
0000    39 ; OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY
0000    40 ; CHECKING FOR AN SS$_NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS
0000    41 ; AND EXPECTED FUNCTIONALITY PERFORMED.
0000    42 ;
0000    43 ; ENVIRONMENT:  USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE,
0000    44 ;                DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.
0000    45 ;
0000    46 ; AUTHOR: THOMAS L. CAFARELLA,          CREATION DATE: JUN, 1977
0000    47 ;
0000    48 ; MODIFIED BY:
0000    49 ;
0000    50 ;          : VERSION
0000    51 ; 01     -
0000    52 ;--
```

```
0000     54          .SBTTL  DECLARATIONS
0000     55 ;
0000     56 ; INCLUDE FILES:
0000     57 ;
0000     58          $PRVDEF                         ; PRIVILEGE BIT DEFINITIONS
0000     59          $PHDDEF                         ; PROCESS HEADER OFFSETS
0000     60 ;
0000     61 ; MACROS:
0000     62 ;
0000     63 ;
0000     64 ; EQUATED SYMBOLS:
0000     65 ;
0000     66 ;
0000     67 ; OWN STORAGE:
0000     68 ;
```

```
                                                I 8
00000000     70          .PSECT  RODATA,RD,NOWRT,NOEXE,LONG
     0000    71 TEST_MOD_NAME:: STRING  C,<SATSSS44>     ; TEST MODULE NAME
     0009    72 TEST_MOD_NAME_D: STRING I,<SATSSS44>     ; TEST MODULE NAME DESCRIPTOR
     0019    73 MSG1_INP_CTL:   STRING  I,<  SSSPN!4ZW: CONDITIONS:>
     0039    74                                          ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
     0039    75 MSG3_ERR_CTL::  STRING  I,< *SSSPN!4ZW: !AS>
     0051    76                                          ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
00000004  0051    77 PREVNAME:       .LONG   4                ; PREVIOUS PROCESS NAME STRING DESCRIPTOR
00000008' 0055    78                 .ADDRESS THISPID         ; ........ (USE PID TO MAKE PRCNAM UNIQUE)
00000001  0059    79 CHAR1:          .LONG   1                ; PROCESS NAME STRING DESCRIPTOR (LENGTH 1)
0000000C' 005D    80                 .ADDRESS PROCNAME        ; .........
00000007  0061    81 CHAR7:          .LONG   7                ; PROCESS NAME STRING DESCRIPTOR (LENGTH 7)
0000000C' 0065    82                 .ADDRESS PROCNAME        ; .......
0000000F  0069    83 CHAR15:         .LONG   15               ; PROCESS NAME STRING DESCRIPTOR (LENGTH 15)
0000000C' 006D    84                 .ADDRESS PROCNAME        ; ........
```

```
                00000000     86          .PSECT  RWDATA,RD,WRT,NOEXE,LONG
00000008  0000  00000008     87 PRIVMASK:        .BLKQ   1               ; ADDR OF PRIVILEGE MASK (IN PHD)
00000000  0008  00000000     88 THISPID:         .LONG   0               ; PROCESS ID FOR THIS PROCESS
0000001B  000C  0000001B     89 PROCNAME:        .BLKB   15              ; PROCESS NAME FOR THIS PROCESS
```

```
                        001B     91          .SBTTL  CONDITION TABLES
                        001B     92 ;
                        001B     93 ;        ***** CONDITION TABLES FOR SETPRN SYSTEM SERVICE *****
                        001B     94 ;
                        001B     95          COND    1,NOTARG,<PROCESS NAME SPECIFICATION>,-
                        001B     96                    <SPECIFIED, 1 CHAR>,-
                        001B     97                    <SPECIFIED, 7 CHARS>,-
                        001B     98                    <SPECIFIED, 15 CHARS>,-
                        001B     99                    <NOT SPECIFIED>,-
                        001B    100
00000059'               008E    101                     .ADDRESS    CHAR1
00000061'               0092    102                     .ADDRESS    CHAR7
00000069'               0096    103                     .ADDRESS    CHAR15
00000000'               009A    104                     .ADDRESS    0
                        009E    105 ;
                        009E    106          COND    2,NOTARG,<PROCESS NAME EXISTENCE>,-
                        009E    107                    <NAME PREVIOUSLY EXISTED>,-
                        009E    108                    <NAME DID NOT EXIST PREVIOUSLY>,-
                        009E    109
                        00F4    110          COND    3,NULL
                        00F5    111
                        00F5    112          COND    4,NULL
                        00F6    113
                        00F6    114          COND    5,NULL
                        00F7    115
                    00000000    116          .PSECT  SATSSS44,RD,WRT,EXE
```

```
                                        .SBTTL  TM_SETUP, TM_CLEANUP
                                ;++
                                ; FUNCTIONAL DESCRIPTION:
                                ;
                                ;               TM_SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
                                ; REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
                                ; TEST MODULE EXECUTION.
                                ;
                                ; CALLING SEQUENCE:
                                ;
                                ;       BSBW TM_SETUP   BSBW TM_CLEANUP
                                ;
                                ; INPUT PARAMETERS:
                                ;
                                ;       NONE
                                ;
                                ; IMPLICIT INPUTS:
                                ;
                                ;       NONE
                                ;
                                ; OUTPUT PARAMETERS:
                                ;
                                ;       NONE
                                ;
                                ; IMPLICIT OUTPUTS:
                                ;
                                ;       TM_SETUP:  COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
                                ;                  ALL PRIVILEGES ACQUIRED.
                                ;
                                ; COMPLETION CODES:
                                ;
                                ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                                ;
                                ; SIDE EFFECTS:
                                ;
                                ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                                ;       (VIA RSB) IF ERROR ENCOUNTERED.
                                ;
                                ;--
                                ;
                                ;
                                TM_SETUP::
                        52  D4    CLRL    R2                      ; INITIALIZE
                        53  D4    CLRL    R3                      ; .. CONDITION
                        54  D4    CLRL    R4                      ; .... TABLE
                        55  D4    CLRL    R5                      ; ...... INDEX
                        56  D4    CLRL    R6                      ; ........ REGISTERS
                    FFF3'  30    BSBW    MOD_MSG_PRINT           ; PRINT TEST MODULE BEGIN MSG
00000000'EF 00000000'EF  DE    MOVAL   TEST_MOD_SUCC,TMD_ADDR  ; ASSUME END MSG WILL SHOW SUCCESS
   03   00 00000000'8F  F0    INSV    #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
            00000000'EF
                                    MODE    TO,5$,KRNL              ; KERNEL MODE TO ACCESS PHD
        59 00000000'9F  D0    MOVL    @#CTL$GL_PHD,R9         ; GET PROCESS HEADER ADDRESS
        00000000'EF  69  DE    MOVAL   PHD$Q_PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
                                    MODE    FROM,5$ ; BACK TO USER MODE
                                    PRIV    ADD,ALL                 ; GET ALL PRIVILEGES
```

```
                     0077   174          $SETPRN_S TEST_MOD_NAME_D       ; SET PROCESS NAME
                     0084   175          SS_CHECK  NORMAL                ; CHECK STATUS CODE RETURNED FROM SETPRN
                     00B2   176          $WAKE_S THISPID                 ; GET "MY" PID FOR LATER USE
                     00C1   177          SS_CHECK NORMAL                 ; CHECK NORMAL RETURN
                     00EF   178          $HIBER_S                        ; UNDO WAKE
                     00F6   179          SS_CHECK NORMAL                 ; CHECK NORMAL RETURN
                  05 0124   180          RSB                             ; RETURN TO MAIN ROUTINE
                     0125   181 TM_CLEANUP::
              FED8'  30 0125   182          BSBW    MOD_MSG_PRINT          ; PRINT TEST MODULE END MSG
                  05 0128   183          RSB                             ; RETURN TO MAIN ROUTINE
```

```
                        0129    185          .SBTTL  CONDITION SUBROUTINES - SETUP AND CLEANUP
                        0129    186 ;++
                        0129    187 ; FUNCTIONAL DESCRIPTION:
                        0129    188 ;
                        0129    189 ;               CONDX AND CONDX CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
                        0129    190 ; BEFORE AND AFTER THE VERIFY SOBROUTINE, RESPECTIVELY, WHENEVER A NEW
                        0129    191 ; CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
                        0129    192 ; ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
                        0129    193 ; CONDITION X TABLE IS INCLUDED IN THE CONDX SUBROUTINE AND CLEANED
                        0129    194 ; UP, IF NECESSARY, IN THE CONDX CLEANUP SUBROUTINE. THIS INCLUDES,
                        0129    195 ; ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
                        0129    196 ; OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
                        0129    197 ; VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
                        0129    198 ; (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
                        0129    199 ;
                        0129    200 ; CALLING SEQUENCE:
                        0129    201 ;
                        0129    202 ;       BSBW CONDX   BSBW CONDX_CLEANUP
                        0129    203 ;         WHERE X = 1,2,3,4,5
                        0129    204 ;
                        0129    205 ; INPUT PARAMETERS:
                        0129    206 ;
                        0129    207 ;       CONFLICT = 0
                        0129    208 ;
                        0129    209 ; IMPLICIT INPUTS:
                        0129    210 ;
                        0129    211 ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                        0129    212 ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                        0129    213 ;
                        0129    214 ; OUTPUT PARAMETERS:
                        0129    215 ;
                        0129    216 ;       CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
                        0129    217 ;
                        0129    218 ; IMPLICIT OUTPUTS:
                        0129    219 ;
                        0129    220 ;       R2,3,4,5,6 PRESERVED
                        0129    221 ;
                        0129    222 ; COMPLETION CODES:
                        0129    223 ;
                        0129    224 ;       NONE
                        0129    225 ;
                        0129    226 ; SIDE EFFECTS:
                        0129    227 ;
                        0129    228 ;       NONE
                        0129    229 ;
                        0129    230 ;--
                        0129    231
                        0129    232
                        0129    233
                        0129    234 COND1::
                    05  0129    235          RSB                                ; RETURN TO MAIN ROUTINE
                        012A    236 COND1_CLEANUP::
                    05  012A    237          RSB                                ; RETURN TO MAIN ROUTINE
                        012B    238 COND2::
                    05  012B    239          RSB                                ; RETURN TO MAIN ROUTINE
                        012C    240 COND2_CLEANUP::
                    05  012C    241          RSB                                ; RETURN TO MAIN ROUTINE
```

```
                012D    242 COND3::
 05             012D    243             RSB                             ; RETURN TO MAIN ROUTINE
                012E    244 COND3_CLEANUP::
 05             012E    245             RSB                             ; RETURN TO MAIN ROUTINE
                012F    246 COND4::
 05             012F    247             RSB                             ; RETURN TO MAIN ROUTINE
                0130    248 COND4_CLEANUP::
 05             0130    249             RSB                             ; RETURN TO MAIN ROUTINE
                0131    250 COND5::
 05             0131    251             RSB                             ; RETURN TO MAIN ROUTINE
                0132    252 COND5_CLEANUP::
 05             0132    253             RSB                             ; RETURN TO MAIN ROUTINE
```

```
                                                        .SBTTL  FORM_CONDS
                                                ;++
                                                ; FUNCTIONAL DESCRIPTION:
                                                ;
                                                ;               FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
                                                ;  THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
                                                ;
                                                ; CALLING SEQUENCE:
                                                ;
                                                ;       BSBW FORM_CONDS
                                                ;
                                                ; INPUT PARAMETERS:
                                                ;
                                                ;       NONE
                                                ;
                                                ; IMPLICIT INPUTS:
                                                ;
                                                ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                                                ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                                                ;       FOR X = 1,2,3,4,5 :
                                                ;               CONDX_T - TITLE TEXT FOR CONDX TABLE
                                                ;               CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
                                                ;               CONDX_C - CONTEXT OF THE CONDX TABLE
                                                ;               CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
                                                ;
                                                ; OUTPUT PARAMETERS:
                                                ;
                                                ;       NONE
                                                ;
                                                ; IMPLICIT OUTPUTS:
                                                ;
                                                ;       NONE
                                                ;
                                                ; COMPLETION CODES:
                                                ;
                                                ;       NONE
                                                ;
                                                ; SIDE EFFECTS:
                                                ;
                                                ;       NONE
                                                ;
                                                ;--
                                                
                                                
                                                FORM_CONDS::
                                                        $FAO_S  MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
                                                                                        ; FORMAT CONDITIONS HEADER MSG
FEAB'   30      0152                            BSBW    OUTPUT_MSG                      ; ... AND PRINT IT
    14   00     91      0155                    CMPB    #COND1_C,#NULL                  ; IS CONDITION 1 NULL ?
           03   12      0158                    BNEQU   10$                             ; NO -- CONTINUE
       00BF     31      015A                    BRW     FORM_CONDSX                     ; YES -- SUBROUTINE IS FINISHED
                        015D                    10$:
00000000'EF  0000001B'EF DE     015D            MOVAL   COND1_T,MSG_A                   ; SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF  00000037'EF42 D0   0168            MOVL    COND1_TAB[R2],MSG_B             ; SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
        00000000'EF  00 90      0174            MOVB    #COND1_C,MSG_CTXT               ; SAVE CONDITION 1 CONTEXT FOR FAO
                        017B                    MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO
```

```
                                                     D 9
                     FE82'  30   017B   312          BSBW    WRITE_MSG2                      ; FORMAT AND WRITE CONDITION 1 MSG
                 14    00   91   017E   313          CMPB    #COND2_C,#NULL                  ; IS CONDITION 2 NULL ?
                       03   12   0181   314          BNEQU   20$                             ; NO -- CONTINUE
                     0096   31   0183   315          BRW     FORM_CONDSX                     ; YES -- SUBROUTINE IS FINISHED
                            0186   316 20$:
  00000000'EF    0000009E'EF   DE   0186   317          MOVAL   COND2_T,MSG_A               ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF    000000B6'EF43   D0   0191   318          MOVL    COND2_TAB[R3],MSG_B         ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
          00000000'EF    00   90   019D   319          MOVB    #COND2_C,MSG_CTXT           ; SAVE CONDITION 2 CONTEXT FOR FAO
                            01A4   320          MOV_VAL COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
                     FE59'  30   01A4   321          BSBW    WRITE_MSG2                  ; FORMAT AND WRITE CONDITION 2 MSG
                 14    14   91   01A7   322          CMPB    #COND3_C,#NULL              ; IS CONDITION 3 NULL ?
                       03   12   01AA   323          BNEQU   30$                         ; NO -- CONTINUE
                     006D   31   01AC   324          BRW     FORM_CONDSX                 ; YES -- SUBROUTINE IS FINISHED
                            01AF   325 30$:
  00000000'EF    000000F4'EF   DE   01AF   326          MOVAL   COND3_T,MSG_A               ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF    000000F4'EF44   D0   01BA   327          MOVL    COND3_TAB[R4],MSG_B         ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
          00000000'EF    14   90   01C6   328          MOVB    #COND3_C,MSG_CTXT           ; SAVE CONDITION 3 CONTEXT FOR FAO
                            01CD   329          MOV_VAL COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
                     FE30'  30   01CD   330          BSBW    WRITE_MSG2                  ; FORMAT AND WRITE CONDITION 3 MSG
                 14    14   91   01D0   331          CMPB    #COND4_C,#NULL              ; IS CONDITION 4 NULL ?
                       47   13   01D3   332          BEQLU   FORM_CONDSX                 ; YES -- SUBROUTINE IS FINISHED
  00000000'EF    000000F5'EF   DE   01D5   333          MOVAL   COND4_T,MSG_A               ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
00000000'EF    000000F5'EF45   D0   01E0   334          MOVL    COND4_TAB[R5],MSG_B         ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
          00000000'EF    14   90   01EC   335          MOVB    #COND4_C,MSG_CTXT           ; SAVE CONDITION 4 CONTEXT FOR FAO
                            01F3   336          MOV_VAL COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
                     FE0A'  30   01F3   337          BSBW    WRITE_MSG2                  ; FORMAT AND WRITE CONDITION 4 MSG
                 14    14   91   01F6   338          CMPB    #COND5_C,#NULL              ; IS CONDITION 5 NULL ?
                       21   13   01F9   339          BEQLU   FORM_CONDSX                 ; YES -- SUBROUTINE IS FINISHED
  00000000'EF    000000F6'EF   DE   01FB   340          MOVAL   COND5_T,MSG_A               ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
00000000'EF    000000F6'EF46   D0   0206   341          MOVL    COND5_TAB[R6],MSG_B         ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
          00000000'EF    14   90   0212   342          MOVB    #COND5_C,MSG_CTXT           ; SAVE CONDITION 5 CONTEXT FOR FAO
                            0219   343          MOV_VAL COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
                     FDE4'  30   0219   344          BSBW    WRITE_MSG2                  ; FORMAT AND WRITE CONDITION 5 MSG
                            021C   345 FORM_CONDSX:
                       05   021C   346          RSB                                 ; RETURN TO CALLER
```

```
                                E 9
021D    348          .SBTTL  VERIFY
021D    349 ;++
021D    350 ; FUNCTIONAL DESCRIPTION:
021D    351 ;
021D    352 ;               VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
021D    353 ; TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
021D    354 ; COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
021D    355 ; SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
021D    356 ; ($SETPRN). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
021D    357 ; BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
021D    358 ; AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
021D    359 ; COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
021D    360 ; ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
021D    361 ; THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
021D    362 ; PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
021D    363 ; WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
021D    364 ; AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
021D    365 ;
021D    366 ; CALLING SEQUENCE:
021D    367 ;
021D    368 ;       BSBW VERIFY
021D    369 ;
021D    370 ; INPUT PARAMETERS:
021D    371 ;
021D    372 ;       NONE
021D    373 ;
021D    374 ; IMPLICIT INPUTS:
021D    375 ;
021D    376 ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
021D    377 ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
021D    378 ;       FOR X = 1,2,3,4,5 :
021D    379 ;               CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
021D    380 ;                 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
021D    381 ;                 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
021D    382 ;                 FOR CONDX_E.
021D    383 ;
021D    384 ; OUTPUT PARAMETERS:
021D    385 ;
021D    386 ;       NONE
021D    387 ;
021D    388 ; IMPLICIT OUTPUTS:
021D    389 ;
021D    390 ;       VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
021D    391 ;       IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
021D    392 ;       ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
021D    393 ;       AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
021D    394 ;       ERRORS.
021D    395 ;
021D    396 ; COMPLETION CODES:
021D    397 ;
021D    398 ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
021D    399 ;
021D    400 ; SIDE EFFECTS:
021D    401 ;
021D    402 ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
021D    403 ;       (VIA RSB) IF ERROR ENCOUNTERED.
021D    404 ;
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```
                                021D   405 ;--
                                021D   406
                                021D   407
                                021D   408
                                021D   409 VERIFY::
            00000000'EF   95    021D   410         TSTB    CFLAG                   ; SHOULD CONDITIONS BE PRINTED ?
                          03    13  0223   411         BEQL    5$                      ; NO -- CONTINUE
                        FF0B    30  0225   412         BSBW    FORM_CONDS              ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
                                0228   413 5$:
0000000C'EF 00000000'EF   B0    0228   414         MOVW    TESTNUM,PROCNAME        ; MAKE PROCESS NAME UNIQUE FOR EACH T.C.
                          53    D5  0233   415         TSTL    R3                      ; FIRST CONDITION 2 ELEMENT ?
                          3D    12  0235   416         BNEQ    10$                     ; NO -- GO PROCESS 2ND ELEMENT
                                0237   417         $SETPRN_S PREVNAME              ; YES -- ESTABLISH A "PREVIOUS" NAME
                                0244   418         SS_CHECK NORMAL                 ; ... AND CHECK COMPLETION
                          37    11  0272   419         BRB     20$                     ; ... CONTINUE
                                0274   420 10$:
                                0274   421         $SETPRN_S                       ; DELETE ANY POSSIBLE NAME
                                027D   422         SS_CHECK NORMAL                 ; ... CHECK IT
                                02AB   423 20$:
      58  0000008E'EF42   D0    02AB   424         MOVL    COND1_E[R2],R8          ; GET PRCNAM ADDRESS OUT OF TABLE
                                02B3   425 ;
                                02B3   426 ; ****** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE ******
                                02B3   427 ;
                                02B3   428         $SETPRN_S       (R8)            ; ISSUE SUBJECT SETPRN
          00000000'8F   50    D1    02BC   429         CMPL    R0,#SS$_NORMAL          ; CODE RECEIVED = CODE EXPECTED ?
                          03    12  02C3   430         BNEQU   23$                     ; NO -- GO PROCESS ERROR
                        0061    31  02C5   431         BRW     27$                     ; YES -- CONTINUE
                                02C8   432 23$:
00000000'EF 00000000'8F   D0    02C8   433         MOVL    #SS$_NORMAL,EXPV        ; LOAD UP EXPECTED AND ...
            00000000'EF   50    D0  02D3   434         MOVL    R0,RECV                 ; ... RECEIVED VALUES, THEN EXIT
                                02DA   435         ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM SETPRN>
                                0329   436 27$:
                          58    D5  0329   437         TSTL    R8                      ; WAS PROCESS NAME SPECIFIED ?
                          78    13  032B   438         BEQL    40$                     ; NO -- GO DO SOME CHECKING
                                032D   439 ; *
                                032D   440 ; * IF FOLLOWING RESUME & SUSPND WORK TOGETHER, THEN PROCESS
                                032D   441 ; * NAME WAS ESTABLISHED CORRECTLY.
                                032D   442 ; *
                                032D   443         $RESUME_S PRCNAM=(R8)           ; RESUME USING PROCESS NAME
                                0338   444         SS_CHECK NORMAL                 ; ... AND CHECK RETURN
                                0366   445         $SUSPND_S THISPID               ; SUSPND THIS PROCESS USING PID
                                0375   446         SS_CHECK NORMAL                 ; ... CHECK RETURN
                          3D    11  03A3   447         BRB     VERIFYX                 ; ... AND EXIT
                                03A5   448 40$:
                                03A5   449         $WAKE_S PRCNAM=PREVNAME         ; PRCNAM SHOULD NOT EXIST
                                03B4   450         SS_CHECK NONEXPR                ; CHECK THAT IT DOESN'T
                                03E2   451 VERIFYX:
                          05    03E2   452         RSB                             ; RETURN TO CALLER
```

```
                        .SBTTL  VFY_CLEANUP
                ;++
                ; FUNCTIONAL DESCRIPTION:
                ;
                ;               VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
                ; EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
                ; ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
                ; ERROP IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
                ; ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
                ; IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
                ; WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
                ; POSSIBLY DISCOVERING A SECOND ERROR.
                ;
                ; CALLING SEQUENCE:
                ;
                ;       BSBW VFY_CLEANUP
                ;
                ; INPUT PARAMETERS:
                ;
                ;       NONE
                ;
                ; IMPLICIT INPUTS:
                ;
                ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                ;       FOR X = 1,2,3,4,5 :
                ;               CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
                ;                 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
                ;                 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
                ;                 FOR CONDX_E.
                ;
                ; OUTPUT PARAMETERS:
                ;
                ;       NONE
                ;
                ; IMPLICIT OUTPUTS:
                ;
                ;       NONE
                ;
                ; COMPLETION CODES:
                ;
                ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                ;
                ; SIDE EFFECTS:
                ;
                ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                ;       (VIA RSB) IF ERROR ENCOUNTERED.
                ;
                ;--


                VFY_CLEANUP::
05              RSB                                     ; RETURN TO CALLER
                .END
```

```
$$$$                    = 000002E4 R      04
$$$CHARS                = 0000002A
$$$CHARS1               = 00000017
$$$CHARS2               = 0000001D
$$$CHARS3               = 00000000
$$$CHARS4               = 00000000
$$$CHARS5               = 00000000
$$$COND_A               = 00000001
$$$STRINGS              = 00000001
$$$STRINGS2             = 00000005
$$T2                    = 00000004
BYTE                    = 00000001  G
CFLAG                     ********    X   04
CHAR1                     00000059 R        02
CHAR15                    00000069 R        02
CHAR7                     00000061 R        02
CHMRTN                    ********    X   04
CHM_CONT                  ********    X   04
COMP_SC                   ********    X   04
CONDT                     00000129 RG       04
COND1_C                 = 00000000
COND1_CLEANUP             0000012A RG       04
COND1_E                   0000008E R        03
COND1_H                   00000036 RG       03
COND1_T                   0000001B R        03
COND1_TAB                 00000037 R        03
COND2                     0000012B RG       04
COND2_C                 = 00000000
COND2_CLEANUP             0000012C RG       04
COND2_E                   000000F4 R        03
COND2_H                   000000B5 RG       03
COND2_T                   0000009E R        03
COND2_TAB                 000000B6 R        03
COND3                     0000012D RG       04
COND3_C                 = 00000014
COND3_CLEANUP             0000012E RG       04
COND3_H                   000000F4 RG       03
COND3_T                   000000F4 R        03
COND3_TAB                 000000F4 R        03
COND4                     0000012F RG       04
COND4_C                 = 00000014
COND4_CLEANUP             00000130 RG       04
COND4_H                   000000F5 RG       03
COND4_T                   000000F5 R        03
COND4_TAB                 000000F5 R        03
COND5                     00000131 RG       04
COND5_C                 = 00000014
COND5_CLEANUP             00000132 RG       04
COND5_H                   000000F6 RG       03
COND5_T                   000000F6 R        03
COND5_TAB                 000000F6 R        03
CTL$GL_PHD                ********      X   04
DESC                    = 00000010  G
EFLAG                     ********    X   04
EXPV                      ********    X   04
FAO_DESC                  ********    X   04
FAO_LEN                   ********    X   04
FORM_CONDS                00000133 RG       04
FORM_CONDSX               0000021C R        04
LONG                    = 00000004  G
MOD_MSG_CODE              ********      X   04
MOD_MSG_PRINT             ********      X   04
MSG1_INP_CTL              00000019 R        02
MSG3_ERR_CTL              00000039 RG       02
MSG_A                     ********      X   04
MSG_B                     ********      X   04
MSG_CTXT                  ********      X   04
NOTARG                  = 00000000  G
NULL                    = 00000014  G
OUTPUT_MSG                ********      X   04
PCV                       ********      X   04
PHD$Q_PRIVMSK           = 00000000
PREVNAME                  00000051 R        02
PRIVMASK                  00000000 R        03
PRIV_ARGS               = 00000002
PROCESS_ERR               ********      X   04
PROCNAME                  0000000C R        03
QUAD                    = 00000008  G
RECV                      ********      X   04
REST_REGS                 ********      X   04
SAVE_REGS                 ********      X   04
SS$_NONEXPR               ********      X   04
SS$_NORMAL                ********      X   04
SUCCESS                   ********      X   04
SYS$CMKRNL                ********     GX   04
SYS$FAO                   ********      X   04
SYS$HIBER                 ********     GX   04
SYS$RESUME                ********     GX   04
SYS$SETPRN                ********     GX   04
SYS$SETPRV                ********     GX   04
SYS$SUSPND                ********     GX   04
SYS$WAKE                  ********     GX   04
TESTNUM                   ********      X   04
TEST_MOD_NAME             00000000 RG       02
TEST_MOD_NAME_D           00000009 R        02
TEST_MOD_SUCC             ********      X   04
THISPID                   00000008 R        03
TMD_ADDR                  ********      X   04
TM_CLEANUP                00000125 RG       04
TM_SETUP                  00000000 RG       04
VERIFY                    0000021D RG       04
VERIFYX                   000003E2 R        04
VFY_CLEANUP               000003E3 RG       04
WORD                    = 00000002  G
WRITE_MSG2                ********      X   04
```

Psect synopsis

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
ABS	00000000 (0.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
RODATA	00000071 (113.)	02 (2.)	NOPIC USR CON REL LCL NOSHR NOEXE RD NOWRT NOVEC LONG
RWDATA	000000F7 (247.)	03 (3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SATSSS44	000003E4 (996.)	04 (4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

Performance indicators

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.08	00:00:00.32
Command processing	136	00:00:00.71	00:00:01.65
Pass 1	232	00:00:05.75	00:00:13.47
Symbol table sort	0	00:00:00.45	00:00:00.99
Pass 2	105	00:00:01.57	00:00:03.44
Symbol table output	13	00:00:00.08	00:00:00.08
Psect synopsis output	2	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	519	00:00:08.68	00:00:19.98

The working set limit was 1200 pages.
29938 bytes (59 pages) of virtual memory were used to buffer the intermediate code.
There were 20 pages of symbol table space allocated to hold 299 non-local and 34 local symbols.
508 source lines were read in Pass 1, producing 23 object records in Pass 2.
34 pages of virtual memory were used to define 25 macros.

Macro library statistics

Macro library name	Macros defined
_255DUA28:[SHRLIB]UETP.MLB;1	8
_255DUA28:[SYS.OBJ]LIB.MLB;1	1
_255DUA28:[SYSLIB]STARLET.MLB;2	13
TOTALS (all libraries)	22

605 GETS were required to define 22 macros.

There were no errors, warnings or information messages.

```
MACRO/LIS=LIS$:SATSSS44/OBJ=OBJ$:SATSSS44 MSRC$:SATSSS44/UPDATE=(ENH$:SATSSS44)+EXECML$/LIB+SHRLIB$:UETP/LIB
```